



Aerospace Materials Testing and Analysis

Not Just Data, Knowledge

Company Profile

Established in 1998, IMR Test Labs is an international network of labs (Ithaca, NY; Louisville, KY; Portland, OR; Singapore, and Suzhou, CN) offering a complete scope of accredited materials testing services, including chemical analysis, mechanical testing, metallurgical analysis, cleanliness testing, corrosion testing, failure analysis, fatigue testing and much more.

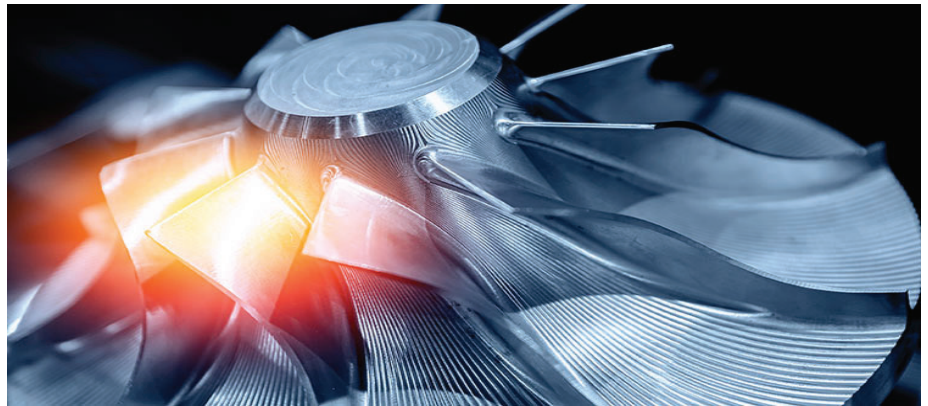
In 2014, we were added to the Curtiss-Wright Surface Technologies family. Now, with an over 90 year-old industry innovator for support, IMR continues to grow our capabilities, equipment, and personnel to remain the first choice provider of materials testing services.



Our materials testing labs are ISO/IEC 17025 accredited (A2LA - All locations), Nadcap (All locations), GE S-400 (All locations) and many major OEMs around the world. We continue to align our stringent quality control systems with our customer's needs, as well as accreditation organization's standards.

Behind the doors of our facilities are over 200 knowledgeable, experienced professionals — engineers, chemists, metallurgists, technicians and support staff — who work side by side with clients across the world in a diverse range of industries including Aerospace, Additive Manufacturing, Automotive- EV/Fuel, Medical Device, Oil & Gas and Energy.

IMR's Committed Specialists Help Mitigate The Risk Out of Aerospace Materials Decisions



Advanced Alloys | Carbon-Fiber Composites | Thermal Coatings

Aerospace engineers are constantly striving to increase strength while lessening weight in airframe materials, engines, and systems.

IMR's team of metallurgists, chemists, mechanical engineers lab, and support personnel are working with the world's biggest and most innovative aerospace OEMs and Tier 1 suppliers from late-stage Research & Development to final production.

IMR has earned certifications from several Aerospace Engine, Aircraft Airframe, and Low Earth Orbit Satellite companies. Our international certifications are in testing both metals and non-metallic materials. See our website for the most current accreditations and certificates.

For a complete listing of our Accreditations, scan this QR Code



www.imrtest.com | 888-464-8422

CURTISS - WRIGHT IMR TEST LABS

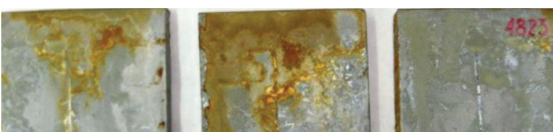
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Lab Testing & Analytical Services



Metallurgical Analysis

- Aggressive Machining Evaluations
- Alpha Case
- Case Depth
- Decarburization
- Effective Case Depth
- Grain Size
- Image Analysis
- Inclusion Content
- Intergranular Attack
- Macro-etching/Micro-etching Metallography
- Microhardness (Knoop, Vickers)
- Microstructure
- Particle Analysis
- Plating & Coating Analysis
- Porosity
- Failure Cause Analysis
- Specialty Material Preparation
- Thermal Spray Coating Analysis
- Weld, Braze & Joining Evaluations



Corrosion Testing/Analysis

- Cyclic Corrosion
- Electrical Resistivity
- Monthly Panel Testing
- QUV Exposure
- Salt Spray Testing
- SO₂ and SO₂/CO₂ Exposure
- Taber Abrasion/Wear Resistance
- Temperature & Humidity Testing



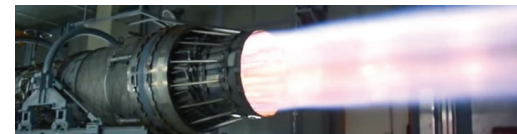
Composite/Polymer Testing

- Additive Analysis to Trace Level
- Bond Strength
- Chemical Exposure Testing
- Chemical Resistance
- Coefficient of Friction
- Compression Set
- Compressive Properties
- Contaminant Identification
- Density & Specific Gravity
- DSC Analysis: Melting Point, Glass Transition, % Crystallinity
- Dynamic Mechanical Analysis (DMA)
- Extractables
- Fatigue Testing
 - Temp from -340°F to 1800°F
- Flammability
- Flexural Properties
- FTIR Analysis
- Hardness: Rockwell, Durometer, Barcol
- Heat Aging
- Impact Strength
- Lap Shear Testing
- Material Identification
- Melt Flow Rate/Index
- Oil Content
- SEFA Testing
- SEM/EDS Analysis: Fillers
- Tensile Testing: Flatwise, Cruciform, Hoop, Standard, -240F to 660F
- TGA: Polymer, Glass and Ash Content
- TMA: Glass Transition, Coefficient of Thermal Expansion, Heat Deflection
- Viscosity
- XRD: Phase Identification
- Crystal Structure



Chemical Testing/Analysis

- Alloy Identification/Verification
- Cleanliness
- Contaminant Analysis
- ICP-AES Analysis
- ICP-MS Analysis for Trace Elements
- OES Analysis
- Particle Size Analysis
- PMI (Positive Material Identification)
- SEM/EDS
- XRF Analysis
- XRD Analysis



Mechanical Testing/Analysis

- Coating Adhesion/Bond Strength
- Creep/Stress Rupture
- Erosion Testing of Coatings
- Fatigue Testing
- High Temperature Fatigue (up to 1800°F)
- Cryogenic Fatigue Testing (down to -320°F)
- High Cycle Fatigue
- Low Cycle Fatigue
- Flexural
- Fracture Mechanics
- Hardness (Brinell, Rockwell)
- Hydrogen Embrittlement
- Impact Testing
- Rotating Beam Fatigue
- Tensile, Yield, Elongation

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